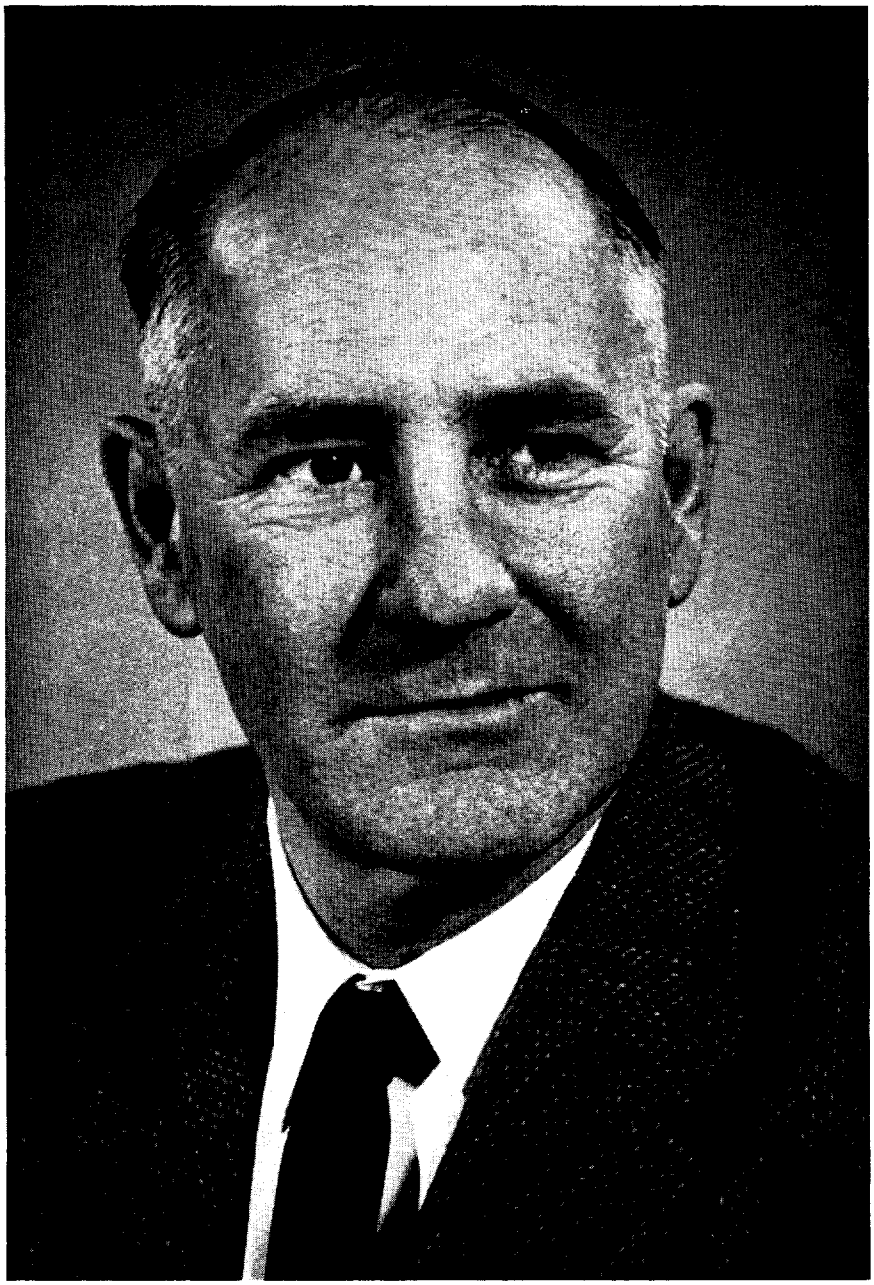

George Wells Beadle

THE NATIONAL Academy of Sciences recently announced Dr. George Wells Beadle to be the recipient of the 1960 Kimber Genetics Award. This recognition goes to a distinguished scientist whose accomplishments have already been acclaimed by the Lasker Award in 1950, Emi Christian Hansen Prize in 1953, Albert Einstein Commemorative Award in 1958, the Nobel Prize in 1958 and the National Cancer Award in 1959.

George Wells Beadle was born in 1903 on a farm at Wahoo, Nebraska. During high school George Beadle became interested in science and decided to go to the University of Nebraska to train for agricultural work. He obtained B.S. and M.S. degrees in Nebraska and

then in 1926 went to Cornell University where he became exposed to the stimulating influence of Professor Rollins Adams Emerson's school of corn genetics. This experience convinced George Beadle that his life's work should be in the field of genetics. No geneticist of his period could avoid contact with the fruit fly Drosophila. When Dr. Beadle was granted a National Research Fellowship at the California Institute of Technology in 1931, he became associated with Dr. Thomas Hunt Morgan and his outstanding group of Drosophila workers. It was here that he became interested in the physiology of gene action which led him to go to Paris for work with Dr. Boris Ephrussi. Their classic publications on the action of genes on eye pigments in Drosophila resulted.

In 1937 Dr. Beadle was appointed to the faculty of Stanford University and continued his work on eye color in Drosophila in cooperation with Dr. Edward L. Tatum. Dr. Beadle soon became convinced that some other organism might better serve his approach to problems of genetics. This decision led him to the common bread mold Neurospora which opened new vistas for viewing the problem which had fascinated him so long. He found here evidence that genes work by controlling the production of enzymes which in turn control the fundamental chemistry of the cell. His ingenious techniques with Neurospora demonstrated that single genes control single enzymes. His great contributions to the field of biochemical genetics resulted in his receiving a Nobel prize in 1958.

In 1946 Dr. Beadle returned to the California Institute of Technology to succeed Dr. Thomas Hunt Morgan as Chairman of the Division of Biology. His stimulating leadership is felt by the fine group of workers associated with him.

Dr. Beadle has been granted honorary doctorates from nine universities. He is a past president of the American Association for the Advancement of Science and many other scientific societies. He is also a member of President Eisenhower's Scientific Advisory Committee.

Dr. Beadle has worked with many forms but is best known for his part in the creation and development of the field of biochemical genetics through the use of Neurospora. His work has opened a new and rich field which has led not only to new knowledge in genetics but also biochemistry. His studies provided significant advances in bacteriology and contributed materially to the commercial production of penicillin.

Fremont, California, September, 1960 D. C. WARREN